

IN THE CLAIMS:

Please amend the claims as follows. The claims are in the format as required by 35 C.F.R. § 1.121.

1. (Currently Amended) A system for continuous purification of a gas flow comprising:

a first sodium ~~fluorine~~ fluoride trap coupled to a gas supply line, wherein said gas supply line conducts said gas flow;

a second sodium ~~fluorine~~ fluoride trap coupled to said gas supply line in parallel to said first sodium ~~fluorine~~ fluoride trap;

a switching mechanism operable to switch gas flow from said first sodium ~~fluorine~~ fluoride trap to said second sodium ~~fluorine~~ fluoride trap at the occurrence of a predefined event; and

one or more fluorine generation cells, wherein said one or more fluorine generation cells are coupled to said gas supply line and wherein said one or more fluorine generation cells provide said gas flow.

2. (Currently Amended) The system of Claim 1, wherein said gas flow comprises: fluorine; and
trace hydrogen ~~fluorine~~-fluoride.

3. (Currently Amended) The system of Claim 1, wherein said switching mechanism is operable to switch gas flow from said first sodium ~~fluorine~~ fluoride trap to said second sodium ~~fluorine~~ fluoride trap when said first sodium ~~fluorine~~ fluoride trap is approximately saturated.

4. (Currently Amended) The system of Claim 3, further comprising:
a first manifold operable to direct said gas flow from said gas supply line to said first sodium ~~fluorine~~ fluoride trap; and
a second manifold operable to direct said gas flow from said gas supply line to said second sodium ~~fluorine~~ fluoride trap.

5. (Canceled)

6. (Currently Amended) The system of Claim 1, further comprising:
a gas output line coupled to said first sodium ~~fluorine~~ fluoride trap and said second sodium ~~fluorine~~ fluoride trap; and
an output filter coupled to said gas output line.

7. (Currently Amended) The system of Claim 6, further comprising:
a low pressure buffer tank in fluid communication with said first sodium ~~fluorine~~ fluoride trap and said second sodium ~~fluorine~~ fluoride trap, wherein said low pressure buffer tank is located downstream of said output filter; and
a compressor in fluid communication with and downstream of said low pressure buffer tank, wherein said compressor is operable to compress gas from said low pressure buffer tank.

8. (Currently Amended) The system of Claim 1, further comprising:
a low pressure buffer tank in fluid communication with said first sodium ~~fluorine~~ fluoride trap and said second sodium ~~fluorine~~ fluoride trap; and
a compressor in fluid communication with and downstream of said low pressure buffer tank, wherein said compressor is operable to compress gas from said low pressure buffer tank.

Claims 9-31 (Canceled)

32. (Previously Presented) The system of Claim 1, wherein said parallel arrangement prevents gas flow between said traps.

33. (Currently Amended) The system of Claim 1, wherein said switching mechanism is operable to prevent gas flow through a specified one of said sodium ~~fluorine~~ fluoride traps at the occurrence of a predefined event.

34. (Currently Amended) The system of Claim 1, wherein said sodium ~~fluorine~~ fluoride traps are coupled to the gas supply line such that each trap is arranged between gas source and fabrication tool.

35. (Currently Amended) The system of Claim 2, wherein said sodium ~~fluorine~~ fluoride traps are coupled to the gas supply line such that each trap is arranged between a respective ~~fluorine~~ fluoride generation cell and a fabrication tool, and wherein said trace hydrogen ~~fluorine~~ fluoride reacts with at least one of said sodium ~~fluorine~~ fluoride traps such that said gas flow into said fabrication tool is substantially free from hydrogen ~~fluorine~~ fluoride.

36. (Currently Amended) A system for continuous purification of a gas flow comprising:
at least one fluorine generation cell, wherein said at least one fluorine generation cell is coupled to a gas supply line, wherein said at least one fluorine generation cell provides said gas flow;

at least two sodium ~~fluorine~~ fluoride traps coupled to said gas supply line, wherein said gas supply line conducts said gas flow, wherein said gas flow comprises fluorine and trace hydrogen ~~fluorine~~ fluoride, and wherein said at least two sodium ~~fluorine~~ fluoride traps are configured in parallel;

at least one manifold operable to direct said gas flow from said at least one ~~fluorine~~ fluoride generation cell to one of said at least two sodium ~~fluorine~~ fluoride traps; and

a switching mechanism operable to switch gas flow such that gas flow is directed to an operable sodium ~~fluorine~~ fluoride trap.

37. (Currently Amended) The system of claim 36, further comprising:

a low pressure buffer tank in fluid communication with said at least two sodium ~~fluorine~~ fluoride traps, wherein said low pressure buffer tank is located downstream of said at least two sodium fluoride trap~~output filter~~; and

a compressor in fluid communication with and downstream of said low pressure buffer tank, wherein said compressor is operable to compress gas from said low pressure buffer tank.

38. (Currently Amended) The system of claim 37, further comprising a gas output line coupled to said at least two sodium ~~fluorine~~ fluoride traps and an output filter coupled to said gas output line.

39. (Currently Amended) The system of Claim 36, further comprising:
a negative pressure bulk storage tank in communication with said at least one ~~fluorine~~
fluoride generation cell, and
at least one individual tool compressor in fluid communication with and downstream of
said negative pressure bulk tank, wherein said at least one individual tool compressor is
operable to compress gas from said negative pressure bulk tank, and to supply, under positive
pressure, process gas to at least one fabrication tool.
40. (New) The system of Claim 1, wherein said gas flow consists of substantially pure
fluorine gas.
41. (New) The system of Claim 40, wherein said substantially pure fluorine gas is provided
to a fabrication tool.
42. (New) The system of Claim 1, further comprising a sodium-fluoride-trap-regeneration
system, wherein the sodium-fluoride-trap-regeneration system comprises:

an apparatus to heat one of said sodium fluoride traps; and
an apparatus to pull vacuum on said heated sodium fluoride trap.
43. (New) The system of Claim 36, wherein said gas flow consists of substantially pure
fluorine gas.
44. (New) The system of Claim 36, further comprising a sodium-fluoride-trap-regeneration
system, wherein the sodium-fluoride-trap-regeneration system comprises:

an apparatus to heat one of said sodium fluoride traps; and
an apparatus to pull vacuum on said heated sodium fluoride trap.
45. (New) The system of Claim 39, wherein said process gas is fluorine.